

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A protective cap (2) for a temperature measurement probe (30) of an infrared radiation thermometer (1) introducible into a body cavity (31), ~~[[said]]~~ the protective cap (2) being comprised of a base body (12) shaped to fit the body cavity (31) and having a window (15) transparent to infrared radiation,

characterized in that the base body (12) is provided with ~~additional structures~~ at least one air chamber (13; 18, 20) at least in parts to improve heat insulation between the temperature measurement probe (30) and the body cavity (31).

Claim 2 (Currently Amended): The protective cap as claimed in claim 1, characterized in that the base body (12) is fabricated from plastic material and that the ~~additional structures~~ the at least one air chamber (13; 18, 20) are formed of soft, porous foamed plastic material (13).

Claim 3 (Canceled).

Claim 4 (Currently Amended): The protective cap as claimed in claim ~~[[3]]~~ 1, characterized in that the ~~several chambers are~~ at least one air chamber is formed by foamed plastic (13) having closed pores.

Claim 5 (Currently Amended): The protective cap as claimed in claim ~~[[3]]~~ 1, characterized in that the ~~several air chambers have their outsides~~ at least one air chamber has its outside close to the body cavity bounded by a flexible film.

Claim 6 (Currently Amended): The protective cap as claimed in claim ~~[[3]]~~ 1, characterized in that the ~~several air chambers have their outsides~~ at least one air chamber has its outside bounded by a flexible outer film fabricated from plastic.

Claim 7 (Currently Amended): The protective cap as claimed in claim ~~[[3]]~~ 1, characterized in that the ~~air chambers are~~ at least one air chamber is subdivided by fin members (22, 23; 25).

Claim 8 (Original): The protective cap as claimed in claim 7, characterized in that the fin members (22, 23) are formed of foamed plastic material.

Claim 9 (Original): The protective cap as claimed in claim 2, characterized in that the window is formed of a window film (15) transparent to infrared radiation.

Claim 10 (Previously Presented): The protective cap as claimed in claim 9, characterized in that the window film (15) is stretched tight by a holding device (26).

Claim 11 (Canceled).

Claim 12 (Currently Amended): The protective cap as claimed in claim 10, characterized in that the holding device (26) is clamped upon the end of ~~a tubular~~ the base body (12) closed by the window.

Claim 13 (Original): The protective cap as claimed in claim 1, characterized in that the entire body base (12) is provided with thermally insulative means (13; 18, 20), and that the window is reduced to the thickness of an infrared transmitting film by hot pressing or hot stamping.

Claim 14 (Previously Presented): The protective cap as claimed in claim 1, characterized in that the base body (12) is formed of plastic material.

Claim 15 (Previously Presented): The protective cap as claimed in claim 2, characterized in that the thermally insulating foamed plastic (13) is made of polyethylene (PE), polyvinyl or polyurethane (PU).

Claim 16 (Previously Presented): The protective cap as claimed in claim 1, characterized in that the base body (12) of the protective cap (2), prior to being applied to the temperature measurement probe (30), is not as yet shaped to fit the body cavity (31) and that it is made of a

material that is expandable so as to be stretched to the shape only when being fitted over the temperature measurement probe (30).

Claim 17 (Currently Amended): A protective cap (2) for a temperature measurement probe (30) of an infrared radiation thermometer (1) introducible into a body cavity (31), ~~[[said]]~~ the protective cap (2) being shaped to fit the body cavity (31) and having a window (15) transparent to infrared radiation, characterized in that the protective cap (2) is fabricated from a thermally insulating material and a forming operation is used to bring the window (15) to the thickness transmissive to infrared radiation, and characterized in that the protective cap (2) includes a base body (12) provided with at least one air chamber (13; 18, 20) to improve heat insulation between the temperature measurement probe (30) and the body cavity (31).

Claim 18 (Original): The protective cap as claimed in claim 17, characterized in that the forming operation is a hot pressing or hot stamping operation.

Claim 19 (Previously Presented): The protective cap as claimed in claim 4, characterized in that the window is formed of a window film (15) transparent to infrared radiation.